facilitating a conductor splice, or extending the length of a circuit.

[CGD 94–108, 61 FR 28281, June 4, 1996]

§ 111.60–19 Cable splices.

(a) A cable must not be spliced in a hazardous location, except in intrinsically safe systems.

(b) Each cable splice must be made in accordance with section 25.11 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1).

[CGD 94–108, 61 FR 28281, June 4, 1996, as amended by USCG–2003–16630, 73 FR 65198, Oct. 31, 2008]

§ 111.60–21 Cable insulation tests.

All cable for electric power and lighting and associated equipment must be checked for proper insulation resistance to ground and between conductors. The insulation resistance must not be less than that in section 34.2.1 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1).

[USCG–2003–16630, 73 FR 65199, Oct. 31, 2008]

§ 111.60–23 Metal-clad (Type MC) cable.

(a) Metal-clad (Type MC) cable permitted on board a vessel must be continuous corrugated metal-clad cable.

(b) The cable must have a corrugated gas-tight, vapor-tight, and watertight sheath of aluminum or other suitable metal that is close-fitting around the conductors and fillers and that has an overall jacket of an impervious PVC or thermoset material.

(c) The cable is not allowed in areas or applications exposed to high vibration, festooning, repeated flexing, excessive movement, or twisting, such as in engine rooms, on elevators, or in the area of drill floors, draw works, shakers, and mud pits.

(d) The cable must be installed in accordance with Article 326 of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1). The ampacity values found in table 25 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1) may not be used.

(e) The side wall pressure on the cable must not exceed 1,000 pounds per foot of radius.

(f) Equipment grounding conductors in the cable must be sized in accordance with Section 250.122 of NFPA NEC 2002. System grounding conductors must be of a cross-sectional area not less than that of the normal current carrying conductors of the cable. The metal sheath must be grounded but must not be used as a required grounding conductor.

(g) On an offshore floating drilling and production facility, the cable may be used as interconnect cable between production modules and between fixed distribution panels within the production modules, except that interconnection between production and temporary drilling packages is prohibited. Also, the cable may be used within columns, provided that the columns are not subject to the conditions described in paragraph (c) of this section.

(h) When the cable is used within a hazardous (classified) location, terminations or fittings must be listed, and must be appropriate, for the particular Type MC cable used and for the environment in which they are installed.

[CGD 94–108, 62 FR 23908, May 1, 1997, as amended by USCG–2003–16630, 73 FR 65199, Oct. 31, 2008]

Subpart 111.70—Motor Circuits, Controllers, and Protection

§ 111.70–1 General.

(a) Each motor circuit, controller, and protection must meet the requirements of ABS Steel Vessel Rules, sections 4–8–2/9.17, 4–8–3/5.7.3, 4–8–4/9.5, and 4–8–3/5; ABS MODU Rules, Part 4, Chapter 3, sections 4/7.11 and 4/7.17; or IEC 60092–301 (all three standards incorporated by reference; see 46 CFR 110.10–1), as appropriate, except for the following circuits:

(1) Each steering gear motor circuit and protection must meet part 58, subpart 58.25, of this chapter.

(2) Each propulsion motor circuit and protection must meet subpart 111.35 of this part.

(b) In ungrounded three-phase alternating current systems, only two motor-running protective devices (overload coil or heater type relay within the motor and controller) need be used in any two ungrounded conductors, except when a wye-delta or a delta-wye transformer is used.